The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte STEPHEN T. GARELLI

Appeal 2007-1922
Application 10/051,200
Technology Center 1700

Decided: May 23, 2007

Before THOMAS A. WALTZ, PETER F. KRATZ, and JEFFREY T. SMITH, *Administrative Patent Judges.*

WALTZ, *Administrative Patent Judge.*

DECISION ON APPEAL

This is a decision on an appeal from the Primary Examiner's rejection of claim 8. Claims 1-7 are the only other claims pending in this application but stand withdrawn from further consideration as directed to a non-elected invention (Br. 1). Although the rejection appealed from is a non-final rejection, we have jurisdiction under 35 U.S.C. §§ 6 and 134 since the claims on appeal have been twice presented and rejected. *See Ex parte Lemoine,* 46 USPQ2d 1420, 1423 (BPAI 1998).

According to Appellant, the invention is directed to a method of molding comprising providing a molding machine with a mold containing an upper mold segment, a lower mold segment, a movable core, a stem, a stem opening, an air valve, a clamping force, where liquid moldable material is injected and allowed to become a solid molded product, and a gas is injected in the centered opening in the stem to open the gas valve in the centered opening in the core and thus inflate the solid molded product until it is released from the core (Br. 2-3). Claim 8 is the sole claim on appeal and is reproduced below:

8. A method of molding, the method comprising:

(I) providing a molding machine containing a mold, wherein the mold comprises:

(A) an upper mold segment having an upper surface;

(B) a lower mold segment having a bottom surface, and

(C) a moveable core having a top surface, a bottom surface and a centered opening therethrough, said opening having a near end and a distal end; wherein each mold segment has a confronting flat surface, each mold segment being capable of mating with the other mold segment at their respective confronting flat surfaces; there being located in the confronting flat surface of each segment, a concavity, each concavity having an opening centered in said concavity;

the opening in the concavity of the lower mold segment running through the lower mold segment and exiting through the bottom surface of the lower mold segment;

the opening in the concavity of the upper mold segment running through the upper mold segment and exiting through the upper surface of the upper mold segment;

the moveable core having an outside configuration essentially identical to the concavities when the mold segments are mated with each other, the core having integrally attached to the bottom thereof, a stem, said stem being slidably mounted in the opening in the concavity of the lower mold segment and extending beyond the bottom surface of the lower mold segment, said stem having centered therethrough, an opening;

the centered opening in the core having an air valve located in and near the near end thereof, said centered opening in the core and said centered opening in the stem being interconnected to allow the intermittent passage of gas therethrough, there being a space created between the outside configuration of the core and the concavities when the mold segments are mated;

(II) providing a clamping force on the mold;

(III) injecting liquid moldable material into the upper mold segment via the upper mold segment opening and allowing the liquid moldable material to fill the space created between the outside configuration of the core and the concavities;

(IV) allowing the liquid moldable material to become a solid molded product;

(V) removing the clamping force on the mold and separating the upper mold segment and the lower mold segment and thereafter, moving the core from the lower mold segment;

(VI) thereafter, injecting gas into the centered opening in the stem, thereby opening the gas valve in the near end of the centered opening in the core, and allowing the solid molded product to be inflated by the injected gas until the solid molded product is released from the core and thereafter, removing the solid molde4d product from the mold.

The Examiner has relied upon the following references as evidence of obviousness:

Cole	US 4,541,795	Sep. 17, 1985
Alieri	US 5,786,079	Jul. 28, 1998

ISSUES ON APPEAL

Claim 8 stands rejected under 35 U.S.C. § 103(a) as unpatentable over Cole in view of Alieri (Answer 3).

Appellant contends that Cole does not teach inflation of the solid molded product, but teaches use of air pressure to move the closure device from the mold, and thus does not include any requirement that the solid product is forced over a core mold through a small opening (Br. 4).

Appellant contends that the use of the word "inflates" by Alieri cannot mean expansion of the cap per se, as the cap has no capability to hold air such that it can expand or inflate, and thus Alieri must mean that compressed air loosens the cap by mere mechanical removal (Br. 5).

The Examiner contends that both Cole and Alieri disclose injection molding machines that utilize gas to aid in ejection of the solid molded product (Answer 4).[1]

The Examiner contends that Alieri does teach that the air inflates the cap, that the shape of the cap is distorted via expansion, and the claimed language does not preclude any other means used in removing the cap (*id.*).

[1] We refer to and cite from the Revised Examiner's Answer dated Jan. 5, 2007.

The Examiner contends that the argued "requirement" that the solid product is forced over a core mold through a small opening is not found in the claims (Answer 4-5).

Accordingly, the dispositive issue presented in the record of this appeal is as follows: does Alieri teach the use of air to "inflate" the molded solid product and thus aid in its removal from the mold?

We determine that the Examiner has established a prima facie case of obviousness in view of the reference evidence, which prima facie case has not been adequately rebutted by Appellant's arguments. Therefore we AFFIRM the sole ground of rejection on review in this appeal essentially for the reasons stated in the Answer, as well as the reasons set forth below.

OPINION

We determine the following factual findings from the record in this appeal:

(1) Cole discloses the method and molding machine essentially as claimed, with the exception that the solid molded product is ejected from the mold by a burst of air through an air injection tube (col. 8, ll. 3-14; col. 9, ll. 54-65; Office action dated Jul. 26, 2005, pages 2-4);[2]

(2) Alieri discloses an injection molding machine and method of molding plastic screw caps or closures, where one embodiment of

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[2] Appellant does not contest or dispute the Examiner's findings that Cole discloses or teaches the basic structure of the injection molding machine and the method of molding as recited in claim 8 on appeal (Br. 4-6; *see* the Office action dated Jul. 26, 2005, page 4; *see also* Cole, Abstract; Fig. 3, and col. 6, l. 25 *et seq.*).

> several methods of removing the solid molded product from the mold involves sending compressed air inside the cap as soon as the lower half-mold has moved away from the plunger, and the feeding of compressed air "inflates" the cap and partially spaces the thread C from the portion **9**, reducing the resistance of the cap to expulsion (col. 1, ll. 6-8; col. 6, ll. 38-60; and Fig. 11).

During prosecution before the Examiner, the verbiage of the proposed claims should be given its broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account any enlightenment or definitions contained in the applicant's written description in the specification. *See In re Morris,* 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997).

Accordingly, the first step in an obviousness analysis is proper claim construction. Therefore, we first look to Appellant's Specification to find the proper meaning of the word "inflated" as used in claim 8 on appeal. *See Phillips v. AWH Corp.,* 415 F.3d 1303, 1315, 75 USPQ2d 1321, 1327 (Fed. Cir. 2005)(en banc)("...the specification 'is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term.'"). Appellant's Specification does not define "inflated" per se but teaches that this word is equivalent to "expanded" (Specification 5:28-31; 6:4-7). This equivalency in the Specification comports with the ordinary usage of the word "inflate" as meaning "to swell or distend with air or gas," "to expand or increase

abnormally," or "to fill with air."[3] Accordingly, giving this word its broadest reasonable meaning in light of the Specification, we construe the claimed word "inflated" to mean that the solid molded product is expanded, distorted, or filled with air or gas to aid in removal from the mold.

In view of our claim construction above, we determine that the teachings of Alieri read on or encompass the "inflated" step of claim 8 on appeal, namely that, to at least some minor extent, the cap or closure of the reference is expanded, distorted, and filled with air. *See* factual finding (2) listed above, where Alieri teaches that the apparatus "send[s] compressed air inside the cap" (thus filling the cap with air), and the feeding of compressed air "inflates" the cap by partially spacing the thread C from the portion **9**, thus distorting or expanding the cap (Alieri, col. 6, ll. 52-60; Answer 4).

We also determine that the Examiner has set forth a reasoned explicit analysis of why Cole and Alieri are properly combined (Office action dated Jul. 26, 2005, pages 4-5; Answer 4). *See KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1740-41, 82 USPQ2d 1385, 1396 (U.S. 2007). We also note that the Examiner correctly states that Appellant's argument concerning the forcing of the molded product over the core mold is not found in the claim on appeal (Answer 5).

For the foregoing reasons and those stated in the Answer, we affirm the Examiner's rejection of claim 8 under § 103(a) over Cole in view of Alieri.

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[3] *See Webster's Third New Int'l Dictionary,* 1159, Gove, ed., G. & C. Merriam Co., 1971.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(2006).

AFFIRMED

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